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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/733,391

12/12/2003

Shigenobu Nakamura

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02/17/2005

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EXAMINER

MULLINS, BURTON S

ART UNIT

PAPER NUMBER

2834

DATE MAILED: 02/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/733,391

Applicant(s)

NAKAMURA, SHIGENOBU

Examiner

Burton S. Mullins

Art Unit

2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5 and 6 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>10/26/04</u> | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement (IDS) submitted on 26 October 2004 has been considered by the examiner.

Allowable Subject Matter

2. Prosecution on the merits of this application is reopened on claims 1-3 and 5-6 considered unpatentable for the reasons indicated below.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-3 and 5-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Umeda et al. (EP 0881747). Umeda teaches a stator of a rotary electric machine, comprising:
a stator core 22 having a plurality of slots 24 (Fig.3); and a poly-phase winding 21 comprising accommodated or 'straight' portions 21a (Fig.2) accommodated in the slots to provide at least two pairs of the accommodated portions (Fig.4), each of the pairs including an inner layer and an outer layer with respect to a radial depth of the slots (Figs.3&4), and turn portions 21b-2 connecting a pair of accommodated portions in the different layers (Fig.4) and providing coil ends 21b-2 on opposite sides of the stator core (Fig.1), wherein the poly-phase winding

Art Unit: 2834

comprises a plurality of phase windings U,V,W (c.7, lines 6-7), each phase winding being made of a continuous wire 21 and the turn portions 21b-2 being arranged side by side with respect to a radial direction on one side of the stator core (Fig.4), the accommodated portions of each phase winding accommodated in slots that are spaced apart at equal pitches (Fig.4), and the number of the accommodated portions accommodated in each slot is the same, i.e., eight accommodated wire portions 21, or four pairs (Figs.3-4).

Regarding claim 2, as seen in Fig.4, the turn portions 21b-2 form a “surrounding arrangement” on one side of the stator core since the turn portions formed by the radially innermost and outermost pairs of wires encompass on either side and to some extent, axially, the turn portions formed by the inner pairs of wires, i.e., the inner pairs of wires forming one group of turn portions are surrounded with another group of turn portions.

Regarding claim 3, as seen in Fig.4, the turn portions 21b-2 can be interpreted as having a “side by side” arrangement (e.g., with respect to the circumferential and axial sides of the turn portions) and “forming a concentric arrangement on one side of the stator core by arranging the turn portions concentrically.”

Regarding claim 5, an even number (eight) of accommodated portions are layered in the slots 24 (Fig.3).

Regarding claim 6, note the round cross-section of wire 21 (Fig.3).

Allowable Subject Matter

5. Claim 4 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and

Art Unit: 2834

any intervening claims. While Umeda's end turns can be interpreted as comprising both a surrounding arrangement and a concentric arrangement, Umeda's end turns are at both ends of the stator core, and hence would comprise a concentric arrangement "disposed only on the one side of the stator core" and a surrounding arrangement disposed "only on another side of the stator core".

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Burton S. Mullins whose telephone number is 571-272-2029. The examiner can normally be reached on Monday-Friday, 9 am to 5 pm. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Burton S. Mullins
Primary Examiner
Art Unit 2834